ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

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NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES: Perchloroethylene Emissions from Dry Cleaning Facilities

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of availability of new information on control of perchloroethylene (PCE) emissions during clothing transfer at dry cleaning facilities which use transfer dry cleaning machines.

SUMMARY: National emission standards for hazardous air pollutants (NESHAP) for PCE dry cleaning facilities were proposed in the FEDERAL REGISTER on December 9, 1991 (56 FR 64382). This notice announces the availability of new information on control of PCE emissions during clothing transfer at dry cleaning facilities which use transfer machines. This notice solicits public review of this information and public comment on the use of this information

in developing NESHAP limiting PCE emissions from dry cleaning facilities.

DATES: Comments: Written comments must be received on or before _____ (date of day 30 days after publication in the FEDERAL REGISTER).

Public Meeting: If anyone requests a public meeting by _____ (date of day 10 days after publication in the FEDERAL REGISTER) a public meeting will be held on _____ _____(date of day 15 days after publication in FEDERAL REGISTER). This meeting will begin at 9 a.m., and it will be held at the EPA Environmental Research Center Annex Auditorium, located at Alexander Drive and Highway 54 in Research Triangle Park, North Carolina. Persons interested in attending the public meeting should call Ms. Julia Stevens at (919) 541-5578 to verify that a public meeting will be held.

Request to Speak at Public Meeting: Persons wishing to make oral statements at this public meeting must contact Ms. Julia Stevens at (919) 541-5578 by _____ (date of day 10 days after publication in the FEDERAL REGISTER).

ADDRESSES: Comments: Written comments should be submitted (in duplicate, if possible) to: Air Docket Section (LE-131), Attention Docket Number A-88-11, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460.

Docket: A special docket category, Docket Number A-88-11, Category IV-M, containing new information on control of PCE emissions during clothing transfer from dry cleaning facilities using transfer machines is available for public inspection between 8:30 a.m. and 3:30 p.m., Monday through Friday, at the EPA's Air Docket, at the address above. A reasonable fee may be charged for copying. Anyone wishing to have a copy of the contents of this docket category mailed to them should contact Mr. George Smith at (919) 541-1549.

FOR FURTHER INFORMATION CONTACT: Mr. George Smith at (919) 541-1549 or Mr. Fred Porter at (919) 541-5251, Standards Development Branch (MD-13), U.S. EPA, Research Triangle Park, NC 27711.

SUPPLEMENTARY INFORMATION: The information presented in this notice is organized as follows:

I. Introduction : On December 9, 1991, NESHAP limiting PCE emissions from new and existing dry cleaning facilities were proposed in the Federal Register (56 FR 64382). The reader is referred to the December 9, 1991 Federal Register notice for the detailed requirements included in the proposed NESHAP.

To summarize briefly, however, the NESHAP proposed to subcategorize the source category of PCE dry cleaning facilities into two subcategories: those using transfer machines and those using dry-to-dry machines. In addition, the NESHAP proposed to exempt from all regulatory requirements, except the notification requirements, existing transfer machines which consume less than 1,100 liters per year (300 gallons per year) of PCE and existing dry-to-dry machines which consume less than 830 liters per year (220 gallons per year) of PCE.

Basically, the NESHAP proposed that all owners and

operators of transfer and dry-to-dry machines consuming more than the amounts of PCE noted above install and operate carbon adsorbers, refrigerated condensers, or equivalent equipment on the vents from these dry cleaning machines. In addition, the NESHAP also proposed that these owners and operators follow pollution prevention practices, such as good operation and maintenance, to prevent liquid or vapor leaks of PCE from dry cleaning equipment. As discussed below, however, the NESHAP proposed no requirements to limit emissions of PCE from clothing transfer at dry cleaning facilities using transfer machines.

This notice summarizes information regarding control of PCE emissions during clothing transfer at dry cleaning facilities using transfer machines which the EPA was unaware of at the time of proposal of the NESHAP. It also summarizes information the EPA was unaware of at proposal of the NESHAP concerning the likelihood that dry cleaning facilities might purchase and install new transfer machines, as well as the use of a piece of dry cleaning equipment referred to within the dry cleaning industry as a "reclaimer."

This notice solicits public comment on this information. It also solicits public comment on what, if any, requirements should be incorporated into final NESHAP at promulgation to

limit emissions of PCE from clothing transfer at dry cleaning facilities using transfer machines. In addition, this notice solicits public comment on what, if any, requirements should be incorporated into the final NESHAP at promulgation limiting PCE emissions from new transfer machines (if any new machines of this type are installed) and what, if any, requirements should be included in the final NESHAP at promulgation limiting PCE emissions from reclaimers. This notice does not reopen the public comment period on the proposed NESHAP; only public comments pertaining to the specific issues mentioned in this notice will be reviewed and considered by the EPA in developing the final NESHAP for promulgation.

II. Background: Under Title III of the 1990 CAA, NESHAP limiting PCE emissions from major source dry cleaning facilities (that is, those which emit or have the potential to emit more than 10 tons per year of PCE) must reflect maximum achievable control technology (MACT). For new major source dry cleaning facilities, MACT can be no less stringent than the level of emission control currently achieved at the best performing similar source. Thus, it would appear that the final NESHAP promulgated for new major source dry cleaning facilities which use transfer machines must include requirements requiring use of the technologies outlined below

(or equivalent technologies) for control of PCE emissions during clothing transfer. Specific public comment is solicited on whether the emission control achieved by the technologies outlined below for controlling PCE emissions during clothing transfer must be or should be considered MACT for new major source dry cleaning facilities which use transfer machines.

For existing major source dry cleaning facilities, MACT can be no less stringent than the level of emission control currently achieved at the best performing 12 percent of similar sources. Far fewer than 12 percent of existing major source dry cleaning facilities which use transfer machines use any of the technologies outlined below for control of PCE emissions during clothing transfer. MACT must, however, also reflect the maximum degree of emission control which the Administrator determines is achievable, considering the costs and any non-air quality health and environmental and energy impacts associated with this emission control. Specific public comment, therefore, is solicited on whether the emission control achieved by the technologies outlined below for controlling PCE emissions during clothing transfer should be considered MACT for existing major source dry cleaning facilities which use transfer machines (that is, achievable

considering the costs and other impacts associated with the use of these technologies). If these technologies are considered MACT for existing major source dry cleaning facilities using transfer machines, the final NESHAP promulgated would include requirements requiring the use of these technologies (or equivalent technologies) at existing major source dry cleaning facilities using transfer machines.

Only a small percentage of dry cleaning facilities, however, are considered major sources. Most dry cleaning facilities are considered area sources (that is, they emit less than 10 tons per year of PCE). Under Title III of the 1990 CAA Amendments, NESHAP for new and existing area sources may reflect MACT or they may reflect generally available control technology (GACT). The December 9, 1991 Federal Register notice proposed that NESHAP for both new and existing area source dry cleaning facilities reflect GACT and the reader is referred to that Federal Register notice for further detail. This notice is not reopening for public comment this proposed action to base NESHAP for area source dry cleaning facilities on GACT.

GACT is the maximum degree of emission control the Administrator determines is reasonable, considering the costs and other impacts associated with this emission control. GACT

may or may not be as stringent as MACT. In addition, as with MACT, GACT may be different for new area sources than for existing area sources.

Specific public comment is solicited on whether the technologies outlined below should be considered generally available (that is, GACT) for controlling PCE emissions during clothing transfer at new and/or existing area source dry cleaning facilities using transfer machines. In other words, should use of these technologies be considered reasonable in light of the costs and other impacts associated with their use, and should the final NESHAP promulgated include requirements requiring the use of these technologies (or equivalent technologies) at new and/or existing area source dry cleaning facilities using transfer machines.

The new information outlined below on control of PCE emissions during clothing transfer at dry cleaning facilities using transfer machines has been included in Docket A-88-11 in Docket Category IV-M. Docket Category IV-M is available as an information packet. This information packet was mailed to all those who commented on the December 9, 1991 proposed NESHAP. Anyone else who wishes to receive the information packet will be sent a copy (see ADDRESSES).

III. Emissions of PCE During Clothing Transfer: There

are two types of dry cleaning machines: transfer machines and dry-to-dry machines. A transfer machine consists of two pieces of equipment: a washer and a dryer. At the conclusion of the washing cycle, clothing is manually transferred from the washer to the dryer. Since this clothing is damp with PCE, this step is a significant source of PCE emissions at dry cleaning facilities using transfer machines.

A dry-to-dry machine consists of a single piece of equipment which serves as both a washer and a dryer. As a result, there is no clothing transfer step at facilities using dry-to-dry machines. Since the clothing transfer step is eliminated, there are no PCE emissions during clothing transfer.

The table below illustrates the significance of PCE emissions during clothing transfer in comparison to overall PCE emissions at both transfer and dry-to-dry machines.

Emission Factors for Dry Cleaning Machines

(Pounds of PCE Per 100 Pounds of Clothes)

Source	Transfer	Dry-to-Dry
Machine Vent	4.0	3.1
Clothing Transfer	**2.5**	**0**
Equipment Leaks	2.5	2.5
Total	**9.0**	**5.6**

Nearly a third of all PCE emissions from transfer machines are created during clothing transfer. Overall, transfer machines emit almost twice the PCE emissions that dry-to-dry machines do.

IV. Control of Emissions During Clothing Transfer: At the time of the December 9, 1991 proposal of NESHAP to limit PCE emissions from dry cleaning facilities, the EPA was unaware of any technologies for controlling PCE emissions during clothing transfer at facilities using transfer machines. Public comments submitted in response to the proposal, however, as well as additional information gathered by EPA in response to these public comments, indicate there are several technologies which have been developed recently to control these emissions.

These technologies are termed transfer enclosures for the purpose of further discussion. A transfer enclosure captures or collects PCE emissions during clothing transfer at dry cleaning facilities using transfer machines. Transfer enclosures have been subclassified into two types: hamper enclosures and room enclosures.

In addition to the use of transfer enclosures, another approach to control PCE emissions during clothing transfer is to replace the transfer machine with a dry-to-dry machine. This approach eliminates the need for clothing transfer, thus

eliminating PCE emissions from this step.

As mentioned earlier, in response to public comments submitted on the December 9, 1991 proposed NESHAP, EPA has attempted to gather all available information on various technologies for capturing and controlling PCE emissions during clothing transfer at dry cleaning facilities using transfer machines. This notice summarizes the results of these efforts and EPA believes all available information has been collected. There may, however, remain other technologies the EPA is unaware of for controlling PCE emissions during clothing transfer at dry cleaning facilities using transfer machines and, as a result, this notice solicits information on any other technologies that may be in use for this purpose.

A. Hamper Enclosures: Clothing is transferred from the washer to the dryer at dry cleaning facilities using transfer machines in a clothing hamper. A hamper enclosure basically consists of a hood or canopy that effectively encloses the clothing hamper and the open door of the washer when clothing is removed from the washer and placed in the clothing hamper. The same or a different hood or canopy is used to effectively enclose the clothing hamper and the open door of the dryer when the clothing is transferred from the hamper to the dryer. In addition, the clothing hamper is covered or enclosed when

it is wheeled from the washer to the dryer, as well as when it is not in use, to prevent escape of PCE vapors from the hamper.

Hamper enclosures are constructed of a material impervious to PCE vapors, typically clear plastic. The use of clear plastic permits the operator to see into the enclosure. Openings or slits in the hamper enclosure provide access, allowing one to reach into the enclosure, open the door of the washer or dryer, transfer clothing to or from the hamper, and then close the door of the washer or dryer. Sleeves and gloves may be attached to these openings or slits, so that when one reaches into the enclosure, their arms and hands are covered.

If the hamper enclosure has openings through which PCE vapors could escape during clothing transfer, fans are used to draw room air into the enclosure to prevent PCE vapors from escaping. Captured PCE vapors are routed to a control device for control. If the hamper enclosure has no openings through which PCE vapors could escape, fans are not necessary.

Hamper enclosures currently sell for about $3,000. Operation and maintenance costs are reported to be negligible, and in some cases, particularly for larger dry cleaning facilities, the use of hamper enclosures are reported to "pay

for themselves" through the savings generated as a result of additional PCE solvent recovery.

B. Room Enclosures: A room enclosure, as the name implies, basically consists of a room built to enclose the transfer machine —both the washer and the dryer. The enclosure is constructed of a frame covered by a material impervious to PCE vapors. The frame is typically metal, but could be constructed of other materials, and the material covering the frame is typically clear plastic. A fan is turned on to draw air from outside the room enclosure through louvered door opening(s) in the enclosure during clothing transfer to collect PCE vapors. The PCE vapors collected during clothing transfer are routed to a control device for control.

The louvered door opening(s) in the room enclosure typically consist of strips of plastic hanging from the top of the door openings to the floor. These strips of plastic are moved aside to permit entry to or exit from the room enclosure.

Room enclosures currently sell for about $10,000-$12,000. Operation and maintenance costs are reported to be negligible.

C. Replacement by Dry-to-Dry Machines: Each of the technologies mentioned above are used with a transfer machine

to control PCE emissions during clothing transfer. Another approach to control PCE emissions from clothing transfer is to replace the transfer machine with a dry-to-dry machine. Dry-to-dry machines perform both the washing cycle and the drying cycle in the same machine. The use of a dry-to-dry machine, therefore, eliminates the clothing transfer step. As a result, this eliminates PCE emissions from clothing transfer.

A new dry-to-dry machine can cost as much as $25,000 or more depending on the size of machine purchased. In addition to the cost of purchasing a new dry-to-dry machine, however, there would be additional costs associated with the removal of the existing transfer machine, since many dry cleaning facilities would probably have to remove the existing transfer machine to make space for a new replacement dry-to-dry machine.

D. Control Performance: Information on the emission control performance of transfer enclosures is limited. Transfer enclosures have been developed relatively recently, and only a small number of dry cleaning facilities currently use them. Based on observations during visits to sites using transfer enclosures and the use of "engineering judgement," the hamper enclosure is considered to be about 75 percent effective in reducing PCE emissions during clothing transfer

at dry cleaning facilities using transfer machines. The room enclosure is considered to be about 95 percent effective. In comparison, replacement of an existing transfer machine with a new dry-to-dry machine is 100 percent effective since the clothing transfer step is eliminated.

V. Preliminary Economic Impact Assessment: As discussed in the December 9, 1991 Federal Register notice proposing NESHAP for dry cleaning facilities using PCE, the Regulatory Flexibility Act (5 U.S.C. 601 et seq.) requires that special consideration be given during the development of regulations to the potential impacts of regulation on small business entities. Dry cleaning firms are generally small businesses and a large portion of these businesses are family-owned and operated. Many of these businesses are characterized by limited cash flows, marginal profitability and, and as result, do not have ready access to large amounts of capital for investment in the business. Thus, the economic impact analysis undertaken to support the proposed NESHAP focused on the potential impact of the NESHAP on small dry cleaning facilities.

A. Projected Economic Impacts at Proposal: The reader is referred to the December 9, 1991 Federal Register notice for a full discussion of the economic impact analysis

undertaken to support the proposed NESHAP. Two significant potential impacts examined in the analysis were the number of firms projected to experience difficulty raising capital to purchase the emission control equipment required by the NESHAP and the number of projected closures that might occur as a result of adopting the NESHAP. To summarize briefly, the analysis projected that some 670 facilities could experience difficulty raising the capital necessary to comply with the proposed NESHAP and some 30 facilities could close as a result of adopting the proposed NESHAP.

The proposed NESHAP included an exemption from the major requirements of the NESHAP for facilities with gross annual revenues of less than $100,000. (This exemption was expressed in terms of an annual PCE consumption level.) If the exemption level was lowered to only exempt facilities with gross annual revenues of less than $50,000, some 360 additional facilities could experience difficulty raising the capital necessary to comply and some 150 additional facilities could close. As a result, the total number of facilities that might experience difficulty raising the capital necessary to comply with the NESHAP could increase from about 670 to about 1,030, and the total number of facilities that might close could increase from about 30 to about 180.

If the exemption level was lowered to only exempt facilities with annual gross revenues of less than $25,000, some further 1,260 additional facilities could experience difficulties raising the capital necessary to comply and some further 280 additional facilities could close. As a result, the total number of facilities that might experience difficulties raising the capital necessary to comply with the NESHAP could increase from about 670 to about 2,290, and the total number of facilities that might close could increase from about 30 to about 460.

B. Preliminary Assessment of Economic Impacts: To examine the potential economic impacts that might be associated with including requirements to limit PCE emissions from clothing transfer in the final NESHAP adopted at promulgation, a preliminary assessment of these impacts was undertaken. This preliminary assessment employed the same analytic methodology as that used in the economic analysis undertaken to support the proposed NESHAP. Due to a number of concerns, however, which are discussed further below, this preliminary assessment is considered limited in scope.

The major limitation is the assumption that all dry cleaning facilities with transfer machines could purchase and install a hamper enclosure at a cost of $3,000 to limit PCE

emissions from clothing transfer. The EPA has a number of concerns with this assumption (as discussed below), but given the time and difficulty associated with developing a more sophisticated methodology that might model a "monopolistic market" environment, EPA chose to use this assumption to examine the potential economic impacts under what might be termed a "best case" scenario.

The complete preliminary economic impact assessment is included in docket category IV-M. To briefly summarize the projected impacts, however, the preliminary assessment projects that if requirements based on the use of hamper enclosures (or equivalent equipment) were included in the proposed NESHAP to limit PCE emissions from clothing transfer, some 490 additional dry cleaning facilities might experience difficulty raising the capital necessary to comply with the NESHAP and some additional 5 facilities might close. Thus, including such requirements in the proposed NESHAP could increase the number of firms projected to experience difficulty raising the capital necessary to comply with the NESHAP from about 670 to about 1,160. The projected number of facilities that might close could increase from about 30 to about 35.

As mentioned, the proposed NESHAP include an exemption

from the major requirements of the NESHAP for dry cleaning facilities with annual gross revenues of less than $100,000. The projections cited above also assume this exemption level would apply to requirements to limit PCE emissions from clothing transfer. If the exemption level for the requirements to control PCE emissions from clothing transfer was lowered to exempt only facilities with annual gross revenues of less than $50,000 (but the $100,000 exemption level still applied to all other major requirements of the NESHAP), some 310 additional facilities could experience difficulties raising the capital necessary to comply and some 130 additional facilities might close. Thus, the total projected number of facilities that might experience difficulty raising the capital necessary to comply with the NESHAP could increase from about 670 to about 1,470 and the total number of facilities that might close could increase from about 30 to about 165.

Finally, if the exemption level for requirements to control PCE emissions from clothing transfer was lowered to only exempt facilities with annual gross revenues of less than $25,000, the preliminary assessment projects some further 300 additional facilities could experience difficulties raising the capital necessary to comply and some further 130

additional facilities might close. Thus, the total projected number of facilities that might experience difficulties raising the capital necessary to comply with the NESHAP could increase from about 670 to about 1,770 and the total number of facilities that might close could increase from about 30 to about 295.

The magnitude of these potential impacts associated with including requirements in the NESHAP to limit PCE emissions from clothing transfer is considered quite significant. As discussed in the December 9, 1991 Federal Register notice proposing the NESHAP for PCE dry cleaning facilities, the costs of the emission control equipment necessary to comply with the proposed NESHAP were estimated to be in the range of $6,000 to $8,000. As mentioned above, the preliminary assessment assumes the equipment necessary to control PCE emissions from clothing transfer at dry cleaning facilities using transfer machines would cost about $3,000. Thus, the magnitude of these potential impacts projected by the preliminary assessment is not surprising.

C. Concerns with Preliminary Assessment: As mentioned earlier, the EPA believes this preliminary assessment of potential economic impacts associated with requirements to limit PCE emissions from clothing transfer at dry cleaning

facilities using transfer machines is limited in scope. As a result, the projected impacts cited above are viewed as a "best case" scenario. A more sophisticated analysis would probably indicate the potential impacts would be much more severe.

The basic reason stems from the critical assumption in the preliminary assessment that requirements to limit PCE emissions from clothing transfer would be based on the use of hamper enclosures and that dry cleaning facilities using transfer machines would experience costs of only $3,000 to purchase and install a hamper enclosure (or equivalent equipment). It seems highly questionable that the actual costs dry cleaning facilities would experience to obtain this technology would remain as low as $3,000. It seems more likely the actual costs would increase, perhaps substantially, above $3,000 due to the demand created within the dry cleaning industry for this technology by including such requirements in the NESHAP.

Currently, there is only one vendor actively selling hamper enclosures and this vendor has obtained patents on his device. This vendor has sold about 20 hamper enclosures. A second vendor has sold hamper enclosures in the past of a somewhat different design than that of the first vendor's.

This second vendor no longer does so, however, due to a patent dispute with the first vendor. A third vendor has designed a hamper enclosure, also of a somewhat different design than that of the first vendor's, and has experimented with its use. However, this third vendor appears reluctant to pursue sales at this point.

Including requirements in the NESHAP to control PCE emissions during clothing transfer, based on the use of hamper enclosures (or equivalent equipment), therefore, could give rise to a monopoly market for hamper enclosures. In this environment, the cost of a hamper enclosure would likely increase to that of alternatives--such as the room enclosure.

This alternative, however, is also currently offered only by a single vendor and this vendor has obtained patents on his device. A second vendor has built several custom designed room enclosures which appear quite effective in capturing PCE vapors from clothing transfer. To date, however, the room enclosures built by this second vendor have not included a control device to control the PCE vapors collected by the room enclosure; the collected PCE vapors are merely collected and released to the atmosphere outside the dry cleaning facility.

Consequently, even if requirements included in the NESHAP to limit PCE emissions from clothing transfer were based on

the use of hamper enclosures (or equivalent equipment), the actual costs experienced by dry cleaning facilities to comply with these requirements could increase substantially beyond the $3,000 cost assumed in the preliminary assessment. Eventually other approaches for controlling PCE emissions from clothing transfer would be developed, which would ultimately serve to limit increases in the costs of transfer enclosures. At this point, however, it is very difficult to determine what the actual costs would be of regulatory requirements to control PCE emissions from clothing transfer.

In addition to these concerns regarding the actual costs of transfer enclosures, concerns also exist regarding the ability of the vendor or vendors of these transfer enclosures to supply a large market. Under Title III of the CAA Amendments, all sources for which NESHAP are developed must be in compliance with these NESHAP within three years following adoption or promulgation of the NESHAP.

Currently, about half of the estimated 30,000 commercial dry cleaning facilities are believed to operate with annual gross revenues of more than $100,000. About a third of these facilities are believed to use transfer machines. Thus, including requirements to control PCE emissions from clothing transfer in the final NESHAP adopted at promulgation would

create a demand for as many as 5,000, or possibly more, transfer enclosures.

The vendor of the hamper enclosure has only sold about 20 hamper enclosures. The vendor of the room enclosure has only sold some 5 room enclosures. While this does not mean these vendors could not supply several thousand transfer enclosures within three years, it does raise concerns about their ability to adequately supply the potential market.

This in turn, raises concerns about the fate of existing dry cleaning facilities using transfer machines, if the NESHAP required control of PCE emissions during clothing transfer. Many facilities that could afford to purchase transfer enclosures and who tried to purchase enclosures might be unable to obtain and install them within the three year time frame provided by the Act. This would require the EPA to take enforcement action against these dry cleaning facilities and this, quite possibly, could result in a substantial number of closures.

As mentioned earlier, another approach to limit PCE emissions from clothing transfer at dry cleaning facilities using transfer machines is to replace the transfer machines with dry-to-dry machines. The costs of a new dry-to-dry machine, however, can be as much as $25,000 or more. As a

result, the potential impacts associated with including requirements in the NESHAP which effectively required replacement of existing transfer machines with new dry-to-dry machines would be much more severe than the potential impacts cited above. Consequently, the EPA is inclined to conclude that control of PCE emissions from clothing transfer through replacement of existing transfer machines with new dry-to-dry machines at existing major source dry cleaning facilities using transfer machines is not achievable within the meaning of the Act. Similarly, the EPA is inclined to conclude this is also not generally available (within the meaning of the Act) at existing area source dry cleaning facilities using transfer machines.

In light of the magnitude of the potential impacts projected by the preliminary assessment, as well as the concerns outlined above which lead the EPA to believe these impacts could be much greater, the EPA is inclined to conclude that control of PCE emissions from clothing transfer at existing major source dry cleaning facilities using transfer machines is not achievable within the meaning of the Act. In addition, the EPA is also inclined to conclude that control of PCE emissions from clothing transfer at existing area source dry cleaning facilities using transfer machines is not

generally available within the meaning of the Act.

As mentioned above, this notice solicits public comment on whether control of PCE emissions during clothing transfer is achievable (within the meaning of the Act) for existing major source dry cleaning facilities and/or generally available for existing area source dry cleaning facilities using transfer machines. This judgment must take into consideration the potential impacts and concerns outlined above. Specific comment on the potential impacts and concerns outlined above is solicited. In addition, if control of PCE emissions from clothing transfer is considered achievable and/or generally available, specific comment is solicited on whether the NESHAP should include requirements based on the use of hamper enclosures, room enclosures, replacement of transfer machines by new dry-to-dry machines, or some other approach.

VI. New Transfer Machines: At the time of proposal of the December 9, 1991 NESHAP for PCE dry cleaning facilities, the EPA believed that no new transfer machines had been sold in recent years and that no new transfer machines would be sold in the future. All new dry cleaning machines were expected to be dry-to-dry machines, mainly because of the problems arising from occupational exposure to PCE emissions that may occur

during clothing transfer at dry cleaning facilities using transfer machines.

The permissible exposure limit (PEL) for PCE of 25 parts per million (ppm), which the Occupational Safety and Health Administration (OSHA) had adopted, was felt to be a major driving force from transfer machines to dry-to-dry machines. In fact, EPA believed that transfer machines would not be able to meet this OSHA PEL.

Public comment has stated otherwise, however, claiming that maybe half of the existing dry cleaning facilities using transfer machines currently are able to meet the 25 ppm PEL for PCE. Also, the Eleventh Circuit Appeals Court recently remanded the 25 ppm PEL to the OSHA for reconsideration. This action may have the effect of lessening the movement from transfer machines to dry-to-dry machines in the dry cleaning industry.

Public comment has also stated that manufacturers of petroleum solvent transfer machines could sell these machines for use as new PCE transfer machines. Thus, new PCE transfer machines could easily and quickly be offered for sale in response to a demand for such machines. Transfer machines are claimed to be less costly and more productive than dry-to-dry machines, and this could lead to a resurgence in their use.

Accordingly, this notice solicits public comment on the likely market for new transfer machines under the proposed NESHAP.

In addition, this notice also solicits public comment on what requirements, if any, should be included in the final NESHAP promulgated for new PCE transfer machines. Such requirements could require control of PCE emissions from only the washer and dryer vents, could require control of PCE emissions from the washer and dryer vents and during clothing transfer, or could require all new dry cleaning machines to limit PCE emissions to the levels that can be achieved through the use of new dry-to-dry machines. This last approach could effectively preclude the use of new transfer machines.

As mentioned earlier, MACT for new major source dry cleaning facilities must be no less stringent than the level of emission control achieved by the best similar source. As a result, it would appear that the final NESHAP adopted at promulgation must include requirements based on the use of room enclosures (or equivalent equipment) to limit PCE emissions from clothing transfer at new major source dry cleaning facilities using new transfer machines. The EPA, therefore, is inclined to conclude that control of PCE emissions from clothing transfer based on the use of room enclosures (or equivalent equipment) at new major source dry

cleaning facilities using new transfer machines is achievable within the meaning of the Act.

On the other hand, EPA is inclined to conclude that control of PCE emissions from clothing transfer based on the use of new dry-to-dry machines (or equivalent equipment) at new major source dry cleaning facilities using new transfer machines is not achievable within the meaning of the Act. The additional control of PCE emissions achieved through the use of a new dry-to-dry machine over the use of a room enclosure appears marginal, particularly in comparison with the increased costs of a new dry-to-dry machine over a room enclosure. The incremental cost effectiveness of emission control, for example, is about $ 17,000 per ton of PCE.

Specific public comment is solicited on EPA's inclination to conclude that requirements in the NESHAP based on the use of room enclosures to limit PCE emissions from clothing transfer at new major source dry cleaning facilities that use new transfer machines are achievable within the meaning of the Act. In addition, specific public comment is solicited on EPA's inclination to conclude that requirements based on the use of new dry-to-dry machines are not achievable within the meaning of the Act.

With regard to new area source dry cleaning facilities

that use new transfer machines, the EPA is inclined to conclude that requirements based on the use of hamper enclosures (or equivalent equipment) to limit PCE emissions from clothing transfer are generally available within the meaning of the Act. On the other hand, requirements to limit PCE emissions from clothing transfer based on the use of room enclosures (or equivalent equipment), as well as new dry-to-dry machines (or equivalent equipment) are not generally available within the meaning of the Act.

The additional control of PCE emissions achieved through the use of a hamper enclosure appears quite reasonable compared to the costs of a hamper enclosure. The incremental cost effectiveness of emission control, for example, is about $ 700 per ton of PCE.

The additional control of PCE emissions achieved through the use of a room enclosure over the use of a hamper enclosure appears marginal, particularly in comparison with the increased cost of a room enclosure over a hamper enclosure. The incremental cost effectiveness of emission control, for example, is about $9,000 per ton of PCE. It is the same with the use of a new dry-to-dry machine.

Specific public comment is solicited on EPA's inclination to conclude that requirements in the NESHAP based on the use

of hamper enclosures to limit PCE emissions from clothing transfer at new area source dry cleaning facilities that use new transfer machines are achievable within the meaning of the Act. In addition, specific public comment is solicited on EPA's inclination to conclude that requirements based on the use of room enclosures or new dry-to-dry machines are not achievable within the meaning of the Act.

With regard to requirements based on the use of hamper enclosures (or equivalent equipment), it seems reasonable to assume that few, if any, owners/operators, or for that matter, potential new entrants into the dry cleaning industry, with ready access to sufficient capital to purchase a new transfer machine, would experience difficulty raising the additional capital necessary to purchase a hamper enclosure (or equivalent equipment). It also seems reasonable to assume that few, if any, owners/operators, or for that matter potential new entrants into the dry cleaning industry, would find that the additional capital requirements associated with purchasing a hamper enclosure would adversely alter the potential profitability of purchasing a new transfer machine enough to deter this decision.

VI. Reclaimers: EPA was also unaware at proposal of a piece of dry cleaning equipment referred to within the

industry as a reclaimer. It appears that reclaimers are being sold for use with dry-to-dry machines. Used with a reclaimer, a dry-to-dry machine is operated in a manner similar to that of a washer in a transfer machine. Clothing is washed in the dry-to-dry machine and then transferred to the reclaimer for drying. The use of a reclaimer is said to increase the capacity of a dry cleaning facility which uses a dry-to-dry machine.

Although no new transfer machines may have been sold in recent years, a number of reclaimers have been sold. Buying a reclaimer is less expensive than buying a new dry-to-dry machine, and thus buying a reclaimer offers a less expensive means of increasing a dry cleaner's capacity than the purchase of another dry-to-dry machine.

This notice solicits information on the number of reclaimers presently being used within the dry cleaning industry and on potential future sales of reclaimers.

The EPA believes the use of a reclaimer essentially converts a dry-to-dry machine into a transfer machine. As a result, the EPA believes existing dry-to-dry machines which are operated in conjunction with a reclaimer should be considered as transfer machines--not dry-to-dry machines--under the NESHAP. Also, the EPA believes that adding a new

reclaimer to an existing dry-to-dry machine should result in that machine (both the dry-to-dry machine and the reclaimer) being considered a new transfer machine under the NESHAP. This notice, therefore, solicits public comment on this approach to the use of reclaimers under the NESHAP.

VIII. Public Meeting: Written comments should be submitted to the docket at the address provided under ADDRESSES above and by the date provided under DATES above. As mentioned above, in addition to requesting written comments, the EPA has also scheduled a public meeting to solicit oral comments. This public meeting does not constitute a public hearing for purposes of section 307(d)(5) of the CAA Amendments of 1990. A public hearing was scheduled to be held on January 8, 1992 in Research Triangle Park, North Carolina, following proposal of the NESHAP on December 9, 1991. No one requested to speak at this public hearing, so no public hearing was held. Since the opportunity for a public hearing has been provided, the public comment period will not remain open for thirty days following the public meeting. Nevertheless, some parties may want to provide additional written comments in response to what is said at the meeting (if one is held) and, as a result, the comment period will remain open for fifteen days following the public meeting. The time, date, and location of the

public meeting are provided under ADDRESSEES above. The EPA recognizes that the brief period provided for public comment is shorter than normal. However, the EPA is bound by a Consent Decree with the U.S. District Court for the District of Oregon to promulgate the NESHAP for PCE dry cleaning facilities. This requires that public review and comment of the information presented in this notice be done as rapidly as possible, and will not allow for a longer comment period. It should be noted that the focus of the public comments requested is narrow, and the EPA believes the material in Category IV-M of Docket A-88-11 can be adequately reviewed within this time period. In addition, as mentioned earlier, the comment period on other issues is not being reopened; only comments pertaining to the specific issues mentioned in this notice will be accepted.

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Date

William G. Rosenberg
Assistant Administrator
for Air and Radiation